

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| | | | |
|---|--|---|---|
| Applicant's or agent's file reference ACH 3019 P1-WO | FOR FURTHER ACTION | | see Form PCT/ISA/220 as well as, where applicable, item 5 below. |
| International application No. PCT/EP2004/011457 | International filing date (day/month/year) 12/10/2004 | (Earliest) Priority Date (day/month/year) 15/10/2003 | |
| Applicant AKZO NOBEL N.V. | | | |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

COMPOSITION FOR REDUCING OX EMISSIONS IN FCC REGENERATION PROCESS

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/011457

| A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C10G11/04 C10G11/05 C10G11/18 B01J23/10 | | |
|---|--|--|
| According to International Patent Classification (IPC) or to both national classification and IPC | | |
| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 C10G B01J | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | |
| Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, COMPENDEX | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | WO 01/12570 A (AKZO NOBEL NV) 22 February 2001 (2001-02-22) cited in the application the whole document | 1-9 |
| A | EP 0 278 535 A (AKZO NV) 17 August 1988 (1988-08-17) the whole document | 1-8 |
| A | WO 87/06156 A (KATALISTIKS INT INC) 22 October 1987 (1987-10-22) the whole document | |
| | -/- | |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex. | | |
| * Special categories of cited documents : <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p> </div> </div> | | |
| Date of the actual completion of the international search 28 January 2005 | | Date of mailing of the international search report 04/02/2005 |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | | Authorized officer Zuurdeeg, B |

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/011457

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| A | <p>CORMA A ET AL: "Optimization of SOx additives of FCC catalysts based on MgO-Al₂O₃ mixed oxides produced from hydrotalcites"</p> <p>APPLIED CATALYSIS B: ENVIRONMENTAL, vol. 4, no. 1, 19 July 1994 (1994-07-19), pages 29-43, XP008027814</p> <p>ELSEVIER SCIENCE PUBLISHERS B.V., AMSTERDAM, NETH</p> <p>the whole document</p> | |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011457

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|---|---------------------|----------------------------|---------------------|
| WO 0112570 | A | 22-02-2001 | BR 0013137 A | 30-04-2002 |
| | | | CA 2381391 A1 | 22-02-2001 |
| | | | CN 1371341 T | 25-09-2002 |
| | | | WO 0112570 A1 | 22-02-2001 |
| | | | EP 1206424 A1 | 22-05-2002 |
| | | | JP 2003507303 T | 25-02-2003 |
| | | | US 6589902 B1 | 08-07-2003 |
| EP 0278535 | A | 17-08-1988 | AT 60874 T | 15-02-1991 |
| | | | AU 609763 B2 | 09-05-1991 |
| | | | AU 1021288 A | 14-07-1988 |
| | | | BR 8707099 A | 02-08-1988 |
| | | | CA 1314862 C | 23-03-1993 |
| | | | DE 3861771 D1 | 21-03-1991 |
| | | | EP 0278535 A1 | 17-08-1988 |
| | | | GR 3001934 T3 | 23-11-1992 |
| | | | JP 2678276 B2 | 17-11-1997 |
| | | | JP 63182031 A | 27-07-1988 |
| | | | US 4866019 A | 12-09-1989 |
| | | | US 4946581 A | 07-08-1990 |
| | | | US 4952382 A | 28-08-1990 |
| WO 8706156 | A | 22-10-1987 | AU 7286387 A | 09-11-1987 |
| | | | BR 8707259 A | 19-04-1988 |
| | | | EP 0263170 A1 | 13-04-1988 |
| | | | JP 1500571 T | 01-03-1989 |
| | | | WO 8706156 A1 | 22-10-1987 |